

REMARKS

Reconsideration and allowance are respectfully requested in light of the above amendments and the following remarks.

Claims 1-10 have been cancelled in favor of new claims 11-18, which better define the subject matter Applicant regards as the invention. Support for the features recited in claims 11-18 is provided in the original claims and the specification on page 9, line 20, through page 10, line 20.

Claims 1-10 were rejected, under 35 USC §102(e), as being anticipated by Wang et al. (US 6,501,788). To the extent these rejections may be deemed applicable to new claims 11-18, Applicant respectfully traverses.

New claim 11 recites:

*A radio reception apparatus comprising:
a reception level measurer that measures a reception level of a reception signal spread and modulated using a spreading code, said spreading code being a specific known spreading code in a downlink channel and being for common use by a plurality of radio reception apparatuses;
a controller that controls whether or not to execute interference canceller processing according to the reception level of the reception signal; and
an interference canceller that executes the interference canceller processing in accordance with control of the controller.*

Wang fails to disclose, inter alia, the feature recited in claim 11 wherein interference canceller processing is performed in accordance with a measured reception level of a reception

signal. As may be determined by inspection of Wang's Figs. 3, 4A and 4B, 5, 8, and 9, Wang's receiver cannot output a symbol estimate of a received symbol without the intervening process of interference cancellation.

Although Wang's sequence detector 340 may identify a set of spreading sequences having energies exceeding a predetermined threshold, detector 340 does so to identify one or more spreading sequences associated with multi-user interference in the received signal (Wang col. 8, lines 50-56). Wang's detector 340 does not influence whether interference cancellation occurs. Instead, the sequences identified by sequence detector 340, along with symbol estimates and power estimates generated by a symbol estimator 350 and a power estimator 360, are provided to interference canceller 370 (col. 9, lines 13-16). Interference canceller 370 cancels interference components in the correlations $z_{k1}-z_{kL}$ of the k th spreading sequence and the multipath signal components 315-1, ..., 315-L, producing interference-cancelled correlations $z'_{k1}-z'_{kL}$ (col. 9, lines 17-21). The interference-cancelled correlations $z'_{k1}-z'_{kL}$ are then combined in a maximal ratio combiner 380, which produces an output (e.g., a soft information output) that may be used by a symbol estimator 390 (e.g., a decision device) to estimate a symbol transmitted according to the k th spreading code (col. 9, lines 21-26).

As may be determined from the above-paraphrased portions of Wang's specification, Wang discloses that interference cancellation always occurs. Therefore, sequence detector 340 has no influence on the occurrence of the interference cancellation, as proposed in the Office Action.

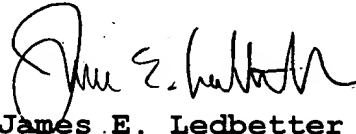
In accordance with the above discussion, Applicant submits that Wang does not anticipate the subject matter defined by claim 11. Claims 17 and 18 similarly recite the feature distinguishing apparatus claim 11 from Wang, but with respect to methods. For similar reasons that this feature distinguishes claim 11 from Wang, so too does it distinguish claims 17 and 18. Therefore, allowance of claims 11, 17, and 18 and all claims dependent therefrom is warranted.

Claim 12 recites that interference cancellation is performed when the measured reception level exceeds a predetermined threshold. Claims 13, 14, 17, and 18 recite specific limitations concerning the timing for determining whether interference cancelling will occur. Since Wang does not disclose controlling whether interference cancellation will occur, it necessarily follows that Wang cannot disclose a precondition or timing for executing such control. Therefore, allowance of claims 12-14, 17, and 18 is warranted for these independent reasons.

In view of the above, it is submitted that this application is in condition for allowance and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,



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